



# DAMIEN BERRIAUD

## CONTACTS

Luigislandstrasse 41  
8051 Zürich, Switzerland  
(+33)7 82 62 27 47



## LANGUAGES

French	Native
German	C1 Goethe Zertifikat
English	C1 (106 TOEFL iBT)
Spanish	Beginner A1
Chinese	Beginner A1

## DIGITAL TOOLS

**Good mastery :** Pack Office,  
LateX, Python (scikit-learn,  
keras, torch), Matlab, SQL, C++

**Notions :** Docker, HTML, CSS,  
Javascript, Linux, Git

## ADDITIONAL INFORMATIONS

- **Driving licence**
- Singer in Centrale Lyon's Choir (for 2 years)
- Classical guitar player (since 2007)
- Climber (7b level) since 2015
- Confirmed cyclist
- Mountain lover
- Mature reader: Science-fiction, philosophy, economy, sciences, architecture
- Participation to the French Robotic's Trophies (2007-2012)

## EDUCATION

2024	<b>PHD CANDIDATE</b> ETH Zürich Interests in Game Theory, Mechanism Design, and Learning.
2021 - 2023	<b>MASTER ELECTRICAL ENGINEERING &amp; INFORMATION TECHNOLOGY</b> ETH Zürich Courses in Graph Theory, Game Theory, Distributed Algorithms, Probabilistic AI, Quantum Information Theory,
2019 - 2023	<b>MASTER OF ENGINEERING</b> École Centrale de Lyon Courses in Mathematics, Physics, Electrical Engineering, Machine Learning, GPA: 3.89/4
2017 - 2019	<b>PREPARATORY CLASS MATHS-PHYSICS*</b> Lycée Blaise Pascal, Orsay Equivalent of BS/BSc 2 in Mathematics
2017	<b>SCIENTIFIC BACCALAUREATE, HIGHLY HONORABLE WITH PRAISE</b> Lycée Blaise Pascal, Orsay

## EXPERIENCES

MARCH 2023 - SEPTEMBER 2023	<b>MASTER THESIS</b> ETH, Zürich <ul style="list-style-type: none"><li>• Studied Karma auctions for the repeated allocation of goods.</li><li>• Proposed a simple no-regret strategy that converges to an approximate Nash Equilibrium.</li><li>• Paper submitted to EC24, available on <a href="#">Arxiv</a>.</li></ul>
SEPTEMBER 2022 - FEBRUARY 2023	<b>RESEARCH PROJECT</b> ETH, Zürich <ul style="list-style-type: none"><li>• Studied exchange stability in Seating Arrangement problems.</li><li>• Best paper award at the Web and Internet Economics Conference 2023,</li><li>• Available on <a href="#">Arxiv</a>.</li></ul>
JUNE-JULY 2022	<b>SUMMER STUDENT</b> CERN, Geneva <ul style="list-style-type: none"><li>• Worked on the Data Acquisition framework XDAQ for the CMS experiment.</li><li>• Implemented RESTful support for Control Network in XDAQ using C++ libraries libhttpserver, libmicrohttpd and cgicc.</li><li>• Followed lectures on Particle Physics, Cosmology, Data Acquisition, Particle Accelerators.</li></ul>
MAI-JULY 2021	<b>RESEARCH INTERNSHIP</b> KTH, Stockholm <ul style="list-style-type: none"><li>• Built a mathematical model of the learning in the brain.</li><li>• Studied the learning of sequences for a Bayesian attractor Network (BCPNN).</li><li>• Application for the learning of language.</li></ul>
2020-2021	<b>RESEARCH PROJECT</b> Institute of Nanotechnologies Lyon (INL) <ul style="list-style-type: none"><li>• Implemented methods of approximate computing for an Hardware Accelerator for Deep Learning (FINN framework).</li><li>• Got familiarized with FPGA cards, Docker environments and Linux servers.</li></ul>
2019-2020	<b>BEST STUDY PROJECT'S AWARD</b> École Centrale de Lyon <ul style="list-style-type: none"><li>• Designed an innovative and ecological system of gray waters recuperation based on a Venturi pump: the Showerchiottes project.</li></ul>

## PUBLICATIONS

- **Stable Dinner Party Seating Arrangements** (Best Paper Award). D. Berriaud, A. Constantinescu, R. Wattenhofer, In Proceedings of the 19th Conference on Web and Internet Economics, Shanghai, China, Dec 2023 ([Arxiv](#))
- **To Spend or to Gain: Online Learning in Repeated Karma Auctions.** D. Berriaud, E. Elokda, D. Jalota, E. Frazzoli, M. Pavone, and F. Dörfler, 2024. ([Arxiv](#))